

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The final Office Action dated June 27, 2006, has been received and its contents carefully reviewed.

Claims 6-22 are withdrawn in this application. Claims 1-5 are rejected to by the Examiner. Claims 1-22 remain pending in this application.

In the Office Action, claim 5 is rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 4,969,718 to Noguchi et al. (hereinafter "Noguchi"). Claims 1-4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Noguchi in view of U.S. Patent No. 6,327,008 to Fujiyoshi (hereinafter "Fujiyoshi").

The rejection to claim 5 under 35 U.S.C. § 102(e) as being anticipated by Noguchi is respectfully traversed and reconsideration is requested. Applicant submits that Noguchi does not disclose each and every element of the claims.

Claim 5 recites a liquid crystal display device having a combination of features including "wherein a parasitic capacitance between the second pixel electrode and the second data line is at least three times greater than a parasitic capacitance between the first pixel electrode and the first data line." Applicant submits that Noguchi does not disclose at least this feature of claim 5, and that accordingly, Noguchi does not anticipate claim 5.

The Examiner in rejecting claim 5 states, "a parasitic capacitance between the second electrode and the second data line [is] inherently three times greater than that between the first pixel electrode and the first data line (since the distance between the second pixel electrode and the second data line is shorter than that between the first pixel electrode and the first data line)." The Examiner identifies elements 513 and 514 as the first and second data lines, and elements 522 and 517 as the first and second pixel electrodes, respectively. In the 'Response to Argument' Section, the Examiner argues that the capacitance "inherently depends on the distance between the pixel electrode and the data line" and that the capacitance increases as the separation distance decreases.

Applicant submits that the Examiner's statement regarding the relationship between capacitance between the electrodes does not reflect the arrangement of the electrodes disclosed in Noguchi. As shown in FIG. 5A of Noguchi, no electrical components are interposed between the second data line (514) and the second pixel electrode (517), while a pixel electrode is interposed between the first data line (513) and the first pixel line (522). Applicant submits that

the capacitance between the first data line (513) and the first pixel line (522) depends not only on the separation distance between (513) and the first pixel line (522), but also depends on the potential of the conductive pixel electrode interposed between them. For example, when the interposed pixel electrode is at the same potential as the first pixel electrode (522) no electric field is generated (and no charge is stored) in the region occupied by the interposed pixel electrode and the first pixel electrode (522). Alternatively, if the interposed pixel electrode is at the same potential as the first data line (513) no electric field is generated (and no charge is stored) in the region between the first data line (513) and the interposed pixel electrode. Further assuming that the entire interposed conductive pixel electrode is at a constant potential, no capacitance between the first data line and the pixel electrode is developed over the equipotential area. Applicant submits that the actual potential on the interposed pixel electrode varies depending on the information being displayed and that the parasitic capacitance between the first data line and the first pixel electrode is accordingly not predicted using the distance relationship cited by the Examiner. Accordingly, Applicant submits that Noguchi does not disclose "wherein a parasitic capacitance between the second pixel electrode and the second data line is at least three times greater than a parasitic capacitance between the first pixel electrode and the first data line" as recited in claim 5.

The rejection to claims 1-4 under 35 U.S.C. § 103(a) as being as being unpatentable over Noguchi in view of Fujiyoshi is respectfully traversed and reconsideration is requested. Applicant submits that the cited references including Noguchi and Fujiyoshi do not teach or suggest each and every element of the claims.

Claims 1-4 each recite a liquid crystal display device having a combination of features including "a second pixel electrode within a second pixel and spaced apart from the second data line by a distance different from said distance between the first data line and the first pixel electrode, wherein a voltage deviation in the first pixel due to parasitic capacitance of the first pixel electrode is substantially the same as a voltage deviation due to parasitic capacitance of the second pixel electrode."

The Examiner correctly states in the Office Action, that Noguchi does not disclose "a voltage deviation in the first pixel due to parasitic capacitance of the first pixel electrode being substantially the same as the of the second pixel electrode."

The Examiner cites Fujiyoshi to cure the deficiencies in the teaching of Noguchi. The Examiner states "the deviation in the first voltage of the first pixel electrode and the second pixel

electrode would be cancelled (i.e., the voltage deviation in the first pixel electrode due to parasitic capacitance of the first electrode being substantially the same as that of the second electrode)." Applicant disagrees with Examiner's contention that "voltage deviation in the first pixel electrode due to parasitic capacitance of the first electrode [is] substantially the same as that of the second electrode" in a construction having "a second pixel electrode within a second pixel and spaced apart from the second data line by a distance different from said distance between the first data line and the first pixel electrode" as recited by claims 1-4. Applicant submits that Fujiyoshi does not teach the cancellation described by the Examiner when "a second pixel electrode within a second pixel and spaced apart from the second data line by a distance different from said distance between the first data line and the first pixel electrode" as recited in the claims. Applicant submits that Noguchi and Fujiyoshi, analyzed singly or in combination, do not teach the quoted combination of features recited in claims 1-4. Accordingly, Applicant submits that claims 1-4 are allowable over Noguchi and Fujiyoshi.

Applicant believes the application is in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. *A duplicate copy of this sheet is enclosed.*

Respectfully submitted,

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